01965

1996/11/00

United States General Accounting Office

GAO

Report to Congressional Requesters

November 1996

EXPORT CONTROLS

Sensitive Machine Tool Exports to China

G A O 75 years 1921 - 1996

GAO/NSIAD-97-4

GAO

United States
General Accounting Office
Washington, D.C. 20548

National Security and
International Affairs Division

B-272257

November 19, 1996

The Honorable Floyd D. Spence
Chairman, Committee on National Security
House of Representatives

The Honorable Frank Wolf
House of Representatives

On September 14, 1994, the Department of Commerce approved an export of machine tools to China. These tools had been used at a plant in Columbus, Ohio, that produced aircraft and missiles for the U.S. military. The contractor, McDonnell Douglas Corporation, was closing the plant and arranged for the sale of the tools to the China National Aero-Technology Import and Export Corporation (CATIC) for use at the CATIC Machining Center, a Chinese government-owned facility. The machine tools were to be used to produce parts for commercial aircraft that would be built in China under a contract with McDonnell Douglas. However, some of the more sophisticated machine tools were shipped to the Nanchang Aircraft Company, a facility that produces fighter aircraft and cruise missiles for the People's Liberation Army as well as civilian products.

Concerned with whether the risk of a diversion was recognized and appropriately dealt with during the export licensing process, you asked that we review the circumstances surrounding the export of these items. Specifically, we addressed the following issues:

- What are the military and civil applications of the equipment and are these military applications important to China's military modernization plans?
- What was the process for approving the licenses and how did the process address the risks associated with this export?
- Were export control license conditions violated and, if so, what was the U.S. government's response?

Background

Commerce is responsible for licensing exports of U.S. dual-use items—items with both military and commercial applications—and helps enforce controls over them. Depending on the item involved and the country of destination, an exporter may be required to submit a license application to Commerce to obtain government approval for the export. The U.S. government controls the export of sophisticated machine tools

for national security and nuclear nonproliferation reasons. Commerce, in consultation with other agencies such as the Department of Defense (DOD),[1] reviews license applications and makes licensing decisions. Complex or sensitive export cases can be escalated to interagency export licensing review committees for discussion and resolution. Commerce's Office of Export Enforcement, along with the U.S. Customs Service, is responsible for ensuring adherence to license provisions by investigating suspected export control violations and pursuing criminal and administrative sanctions.

McDonnell Douglas and CATIC entered into an agreement in 1992 to co-produce 40 MD-80 and MD-90 aircraft in China for the country's domestic "trunk" routes. A contract revision signed in November 1994 reduced the number of aircraft to be built in China to 20 and called for the direct purchase of 20 U.S.-built aircraft. The four Chinese factories involved in the Trunkliner program include the Shanghai Aviation Industrial Corporation, Xian Aircraft Company, Chengdu Aircraft Company, and Shenyang Aircraft Company. The Shanghai facility is responsible for final assembly of the aircraft. All of these factories are under the direction of Aviation Industries Corporation of China (AVIC) and CATIC. CATIC is the principal purchasing arm of China's military as well as many commercial aviation entities.

In May 1994, McDonnell Douglas submitted license applications for exporting machine tools to China. The machine tools were to be wholly dedicated to the production of 40 Trunkliner aircraft and related work. Under the Trunkliner program, the Chinese factories were responsible for fabricating and assembling about 75 percent of the airframe structure and the tools were required to produce parts to support the planned 10 aircraft per year production rate.

The machine tools were to be exported to the CATIC Machining Center. At the time the license applications were being considered, the Machining Center did not yet exist. McDonnell Douglas informed the U.S. government that the Machining Center would be located in Beijing and construction would begin in October 1994. Aircraft parts production would start 14 months later. McDonnell Douglas requested Commerce to approve these applications quickly so that it could export the machine tools to China, where they could be stored at CATIC's expense until the new facility

[1]The Defense Technology Security Administration, in consultation with the military services, is responsible for developing DOD's position on license applications.

in Beijing was ready. Appendix I contains a chronology of key events associated with the machine tools McDonnell Douglas exported to China.

Results in Brief

The machine tools exported by McDonnell Douglas to China have military and commercial applications. These machine tools had been used in the United States to produce parts for military systems but were exported to manufacture parts for commercial passenger aircraft. China needs machine tools to upgrade both its military and commercial aircraft production capabilities.

After a lengthy interagency review, the Department of Commerce approved the license applications with numerous conditions designed to mitigate the risk of diversion. During the review period, concerns were raised about the need for the equipment to support Chinese aircraft production, the reliability of the end user, and the capabilities of the equipment being exported. Senior officials at Commerce, State, Energy, DOD, and the Arms Control and Disarmament Agency agreed on the final decision to approve these applications.

Some of these U.S. exported machine tools were subsequently diverted to a Chinese facility engaged in military production. This diversion was contrary to key conditions in the licenses that required equipment to be used for the Trunkliner program and be stored in one location until the CATIC Machining Center was built. Six weeks after the reported diversion, Commerce suspended licenses for four machine tools not yet shipped to China. Commerce subsequently denied McDonnell Douglas's request to allow the diverted machine tools to remain in the unauthorized location for use in civilian production. Commerce approved the transfer of the machine tools to the Shanghai aviation facility, which is responsible for final assembly of Trunkliner aircraft. The diverted equipment was relocated to Shanghai before it could be misused. Some of the amended license conditions apply only after the equipment is installed, which has not yet occurred. Commerce's enforcement office did not formally investigate the export control violations until 6 months after they were first reported. The U.S. Customs Service and Commerce's enforcement office are now conducting a criminal investigation under the direction of the Department of Justice.

Machine Tools Have Military and Civilian Applications

Advanced machine tools have military and civilian applications and are sought by China for industrial modernization efforts. The McDonnell Douglas export license applications included 10 five-axis machines and 2 coordinate measuring machines. (See table 1 for a list of the equipment licensed for export.) The United States controls all these machines for national security or nuclear nonproliferation reasons. China has limited indigenous capability to produce comparable machine tools and, therefore, relies primarily on foreign imports.

Table 1: McDonnell Douglas Machine Tools Licensed for Export to China

Equipment	Quantity
Five-axis milling machines	4
Five-axis gantry profilers[a]	4
Five-axis numerical control machining center	2
Four-axis vertical profiler	1
Three-axis milling machine	5
Three-axis coordinate measuring machine	2
Hydraulic stretch press	1
Total	**19**

Note: McDonnell Douglas submitted license applications to export 32 machine tools, of which 19 were controlled and required individual licenses. The remaining machine tools were exported under a general license.

[a]Commerce suspended the licenses for the gantry profilers after the reported diversion of some machine tools to the Nanchang Aircraft Company. Gantry profilers are large machines that make aircraft structural pieces such as wing spars.

The machine tools McDonnell Douglas exported to China had been used at a U.S. government-owned plant to produce parts for the B-1 bomber, C-17 military transport aircraft, and the Peacekeeper missile. The more advanced machine tools manufactured such items as military aircraft wing structures, fuselage components, and landing gear and engine parts. For example, five-axis machine tools simultaneously cut and form metal in five different directions producing parts with minimal weight and maximum strength, which improves aircraft performance (see fig.1).

Figure 1: Five-Axis Machine Tool

McDonnell Douglas sold machine tools to China to manufacture parts for commercial aircraft. All of these machine tools can manufacture components for commercial aircraft and other products. For example, a stretch press, which forms sheet metal around a three dimensional mold, can form relatively large parts for aircraft fuselage sections and other aircraft structures. Five-axis machine tools can also be used to make tools and dies for auto body panels, medical and industrial equipment, and molds for consumer products.

According to DOD, the Chinese government wants to buy five-axis machine tools and related equipment to upgrade its military aerospace production facilities[2] as well as its commercial aviation industry. China's modernization program has emphasized joint military-civilian production and self-sufficiency through the acquisition of key Western dual-use technologies.

[2]China's military modernization efforts reportedly include plans to coproduce Russian SU-27 aircraft—comparable to the U.S.-built F-15—and indigenously develop an advanced fighter aircraft believed to be comparable to the U.S.-built F-16.

China has had difficulty acquiring advanced machine tools because of multilateral export controls. Until 1994, the United States and other member countries of the Coordinating Committee for Multilateral Export Controls tightly controlled the export of five-axis machine tools to China and other countries. Such sales required prior notification and unanimous consent from the other members. In March 1994, the Committee disbanded, but former members agreed to continue controlling the export of five-axis machine tools, but eliminated prior notification requirements. Industry officials said that China has the capability to manufacture less sophisticated machine tools, but cannot currently mass produce four- and five-axis machine tools that meet Western standards.[3] However, they noted that Japan, Germany, and other countries are marketing advanced machine tools in China.

Risk of Diversion Recognized and Debated During Licensing Process

Commerce approved the export applications with conditions after about 3 months of interagency discussions and review. During this review process, DOD officials raised several questions about the justification for the export. Their concerns primarily focused on (1) whether the stated end-use on the license applications justified the export; (2) the legitimacy of the CATIC Machining Center, the stated end user of the equipment; and (3) the quantity and capabilities of the machine tools. Prior to approving the licenses, the reviewing agencies added numerous conditions to mitigate the risks identified.

Applications Went Through Interagency Review Process

Commerce, State, Energy, DOD, and the Arms Control and Disarmament Agency officials recognized the risk of diversion, considered it in their deliberations, and added conditions to the licenses to minimize this risk. The export applications were discussed, debated, and ultimately agreed upon at senior levels at these agencies. Because of the significance and complexity of the export, the case was immediately escalated to the Advisory Committee on Export Policy (ACEP). ACEP is chaired by Commerce and is composed of senior officials from Commerce, State, Energy, DOD, and the Arms Control and Disarmament Agency. It provides a forum for senior-level debate on significant export licensing issues.

McDonnell Douglas export applications were discussed and debated at several ACEP meetings in the summer of 1994. Commerce and DOD were the

[3]According to some industry officials, it will take China 5 to 10 years to mass produce five-axis machine tools up to Western standards.

primary agencies in the debate about these license applications.[4] Many of the questions raised at these meetings were subsequently addressed by staff at Commerce, DOD, State, or Energy, often after requesting additional information from McDonnell Douglas. To assist in the interagency deliberations, the Central Intelligence Agency and Defense Intelligence Agency were asked to provide additional information on Chinese acquisition of machine tools and Chinese aviation facilities. The economic impact on McDonnell Douglas of delaying or denying this export was also considered during deliberations.[5]

DOD's Defense Technology Security Administration distributed the applications for comment to groups within the agency and throughout DOD. Initially, the Navy, Air Force, Joint Chiefs of Staff, and Defense Intelligence Agency raised strong objections or recommended denial of these export applications. Senior officials in the agencies that initially recommended denial eventually agreed to approve these licenses once conditions were added. Several DOD officials noted that approving the licenses with conditions was the best strategy for DOD since the licenses would likely be approved at the ACEP. DOD began to consider what conditions could mitigate the apparent risks almost immediately after receiving the applications from Commerce in June 1994.

Commerce Argued the Export Had a Low Risk of Diversion

During the interagency discussions, Commerce officials argued the export of the machine tools involved a low risk of diversion since McDonnell Douglas officials were to be located at the CATIC Machining Center for at least 4 years. They also believed that the machine tools were needed to produce parts for Trunkliner aircraft in China. They noted that, according to McDonnell Douglas officials, the machine tools were between 9 and 26 years old, were not state-of-the-art equipment, and similar or more capable machine tools could be purchased from foreign sources.

Commerce initially recommended that the applications be approved with conditions restricting the end use to commercial aircraft production and that McDonnell Douglas be required to provide a semi-annual certification that this condition was being met. Commerce urged the other reviewing agencies to act quickly on these licenses. McDonnell Douglas claimed that

[4] The Department of Energy also reviewed the export license applications and determined that two machines were of insufficient precision to raise nuclear proliferation concerns.

[5] McDonnell Douglas said the machine tools were worth about $5 million. However, in 1993, CATIC wrote a letter to McDonnell Douglas stating that "whether or not this procurement project will be successful shall have a big influence on the Trunkliner programme and long term cooperation between AVIC [a Chinese government defense industrial corporation] and MDC [McDonnell Douglas]." The Trunkliner program was reportedly valued at about $1 billion.

the Air Force was requiring it to vacate the plant in Ohio by July 5, 1994, and it would be forced to pay high storage fees for the machine tools after that date.[6]

Need for Machine Tools Questioned

During the interagency review of the export applications, various DOD officials commented that there was little justification supporting the need for the export. Officials noted that the machine tools would provide substantial excess production capacity to the Chinese aircraft industry that could be directed toward satisfying military requirements. The Defense Intelligence Agency reported that the machine tools represented production capacity above and beyond the requirements necessary for exclusive production of 40 Trunkliner aircraft. DOD also obtained limited documentation indicating that CATIC asked other aircraft facilities in China if they needed any of the machine tools from the Ohio facility.

DOD concerns were heightened in July 1994 when press reports noted that the production of Trunkliner aircraft in China was to be reduced from 40 to 20 aircraft. During the summer of 1994, in response to questions from DOD, McDonnell Douglas officials stated that they were discussing a reduction to the Trunkliner program with CATIC. In August, however, McDonnell Douglas assured DOD that it had "a firm binding contract for the coproduction of 40 aircraft with CATIC that was agreed to and signed in March 1992."[7] In other correspondence, McDonnell Douglas noted that in many cases the machines, including the five-axis machine tools, were necessary to supply specific parts whether 1 or 100 aircraft were built.

Subsequent events indicated that not all of the exported equipment was needed to support Trunkliner aircraft production. After some of the machine tools were diverted to a Chinese military facility not involved in the Trunkliner program, McDonnell Douglas submitted license applications to Commerce to maintain the equipment at this facility to manufacture parts for trainer aircraft and motorcycles. Although all the equipment was eventually transferred to a facility involved in the Trunkliner program, Chinese officials acknowledged they did not need the stretch press.

[6]According to Air Force officials, McDonnell Douglas determined the date it had to leave the plant and was not charged storage fees until September 1994. McDonnell Douglas, in an August 1994 letter to DOD, stated that "storage is running at $45,000 per month." Beginning in September, the Air Force charged the company about $7,500 per month for storage fees.

[7]McDonnell Douglas and CATIC agreed in principle in May 1994 to amend the Trunkliner agreement. In August 1994, the Secretary of Commerce acknowledged this agreement in a letter to a senior Chinese government official and expressed hope that he could witness the signing of the amendment during his upcoming visit that month.

Concerns About the End User Raised

DOD officials questioned the credibility of the end user of the machine tools—the CATIC Machining Center.[8] This facility had not been built at the time the license applications were deliberated.[9] Some officials cautioned that the tools could be used at the CATIC Machining Center to manufacture sophisticated parts for military-related systems. Officials also questioned how these machine tools would be used after the Trunkliner program ended.

Commerce officials told us that they had previously approved other exports of machine tools for installation at factories not yet built. Commerce officials said that they had done so because machine tools are very large and are easier to install in a new building as construction progresses. However, they could not readily provide us any specific examples where this had been done. Commerce did not perform a prelicense check[10] on the CATIC Machining Center because it would not have been useful since the facility had not yet been built.

Significance of Machine Tools' Capabilities Questioned

Some DOD officials raised concern that the five-axis machine tools being exported were highly capable and that the export of 10 five-axis machines was a significant increase in capability over earlier exports. They noted that the exported machine tools, though old, have long useful lives and that an older machine tool may perform as well as a new one, even though it may lack certain capabilities found in newer models.

U.S. government machine tool experts confirmed that machine tools have long useful lives and can be easily upgraded with new electronics and software and that many U.S. aerospace facilities use machine tools about the same age as those exported to China. Shanghai aviation facility officials said they are considering refurbishing and upgrading some of the machine tools acquired from McDonnell Douglas. U.S. and foreign companies offer refurbishing and upgrading services in China.

Conditions Added to Mitigate Risks

The reviewing agencies added conditions to the licenses to address national security concerns. (See app. II for a detailed list of these

[8] According to Shanghai aviation officials, CATIC developed the concept of the Machining Center about 1993. Shanghai officials told CATIC they might not need the tools because a contract impasse with McDonnell Douglas threatened to end the Trunkliner program.

[9] A facility eventually was built at the location originally designated for the CATIC Machining Center.

[10] A prelicense check helps determine if the overseas purchaser can be considered a suitable recipient of controlled U.S.-origin goods or technological data.

conditions.) These conditions were designed to reduce or mitigate the risk that the equipment would be diverted to an unauthorized location or be used to manufacture parts with military applications. Specifically, the license conditions

- required that the machine tools be stored in one location until the CATIC Machining Center was constructed;
- restricted the use of the equipment to Trunkliner-related production;
- required assurances from CATIC that the equipment would be used as stated;
- required metering devices to record equipment usage and the installation of password protection on some equipment; and
- included various reporting requirements, such as quarterly inspection reports by McDonnell Douglas, that were designed to monitor the equipment and detect unauthorized use.

Commerce, DOD, State, Energy, and the Arms Control and Disarmament Agency agreed to these conditions, and then Commerce obtained concurrence from McDonnell Douglas before approving the licenses. Many of these conditions were copied from prior export licenses for similar equipment, while others were added to address concerns specific to this export.

Problems With CATIC Assurance

One of the conditions was that CATIC provide written assurance that the Machining Center would not use the machine tools for military applications and would use the equipment for Trunkliner-related production. On September 13, 1994, one day before the licenses were approved, U.S. Embassy officials sent Commerce and State a cable reporting that they had met with and obtained the requested written assurance from a senior CATIC official. However, the Embassy cable noted that CATIC had not determined where it would build the Machining Center. CATIC indicated that it may locate the Machining Center near Beijing at a site to be determined or at the Hongxing aircraft company, which is located in another city.[11] Commerce officials could not provide documentation on how this issue was addressed but said they discussed it with McDonnell Douglas before approving the licenses. McDonnell Douglas stated that it is aware of no evidence that Commerce officials discussed this issue with its personnel. DOD officials stated that they did not receive this cable.

[11] As noted above, McDonnell Douglas reported in its application material that the CATIC Machining Center was to be located in Beijing and construction of the facility would begin in October 1994.

U.S. Officials Generally Believe Conditions Were Effective

U.S. government officials stated that the conditions placed on the licenses were effective in preventing the misuse of the machine tools. Commerce and DOD officials noted that McDonnell Douglas's inspection promptly detected the diversion of the equipment. A senior Commerce official also noted that the end-use assurances obtained as part of one condition provided the U.S. government with the leverage needed to insist that the diverted equipment be relocated to an acceptable facility before any misuse of the equipment could occur.

During the licensing review process, some officials had questioned the value of some conditions. For example, one condition called for McDonnell Douglas personnel to report on the use of the equipment and another condition called for metering devices to be installed on the machine tools. One official had noted that McDonnell Douglas personnel would only be able to determine that non-Trunkliner parts were being produced, not whether these parts were for a military application or simply another commercial product. Others had commented that metering devices measuring usage may provide information on how long a machine has been running but not what it is making.

Machine Tools Were Diverted to a Chinese Military Facility Contrary to License Conditions

The machine tools were shipped to three locations contrary to the license conditions and CATIC's assurances regarding end use. McDonnell Douglas officials reported the diversion to the U.S. government after the company had inventoried the equipment on March 24, 1995, in accordance with license conditions. Six machine tools[12] were diverted to the Nanchang Aircraft Company, and the rest were stored in two locations in the port city of Tianjin,[13] near Beijing. (See fig. 2.) McDonnell Douglas officials later visited Nanchang and reported that the stretch press had been installed in a new building designed specifically for this machine.[14] The press, however, was not operational. In a letter to McDonnell Douglas, Commerce indicated that the movement of the equipment to Nanchang and partial installation of the stretch press was a "direct violation of the

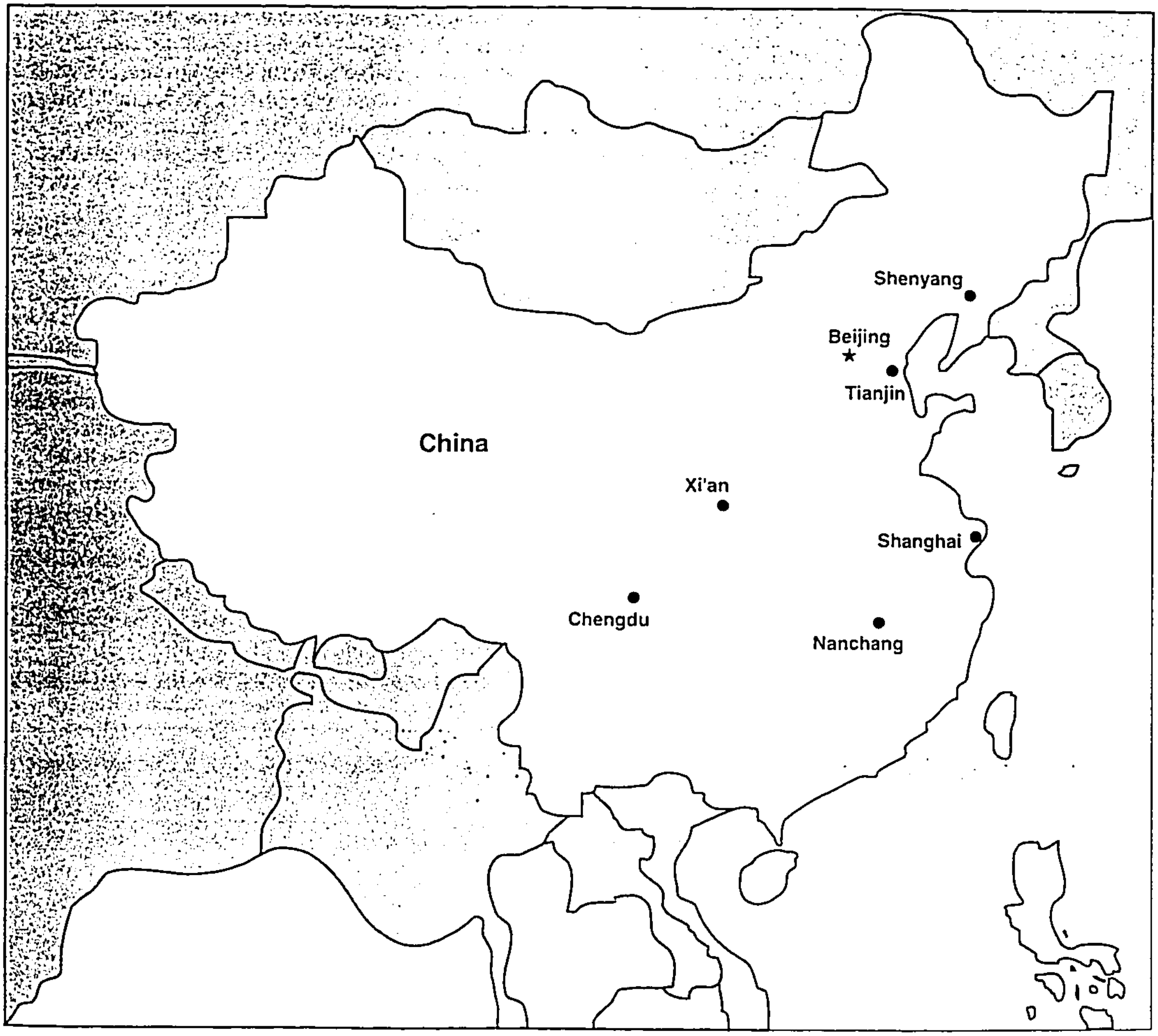
[12] The six machine tools included one hydraulic stretch press, one five-axis machine tool, three three-axis machine tools, and one coordinate measuring machine.

[13] CATIC officials informed McDonnell Douglas that they did not have enough room to store all the machine tools at one location.

[14] U.S. Embassy officials did not visit the Nanchang Aircraft Company to verify the status of the equipment because of Chinese government objections to U.S. post-shipment verification checks. For additional information on Commerce's prelicense/post-shipment verification program in China for dual-use items, see Export Controls: Some Controls Over Missile-Related Technology Exports to China are Weak (GAO/NSIAD-95-82, Apr. 17, 1995).

conditions under which the equipment was originally authorized for export to China."

Figure 2: Locations of Exported Machine Tools and Factories Engaged in Trunkliner Production



Under the terms of the export licenses and CATIC's written assurance, the machine tools were only to be used to manufacture commercial parts for the Trunkliner and other McDonnell Douglas commercial aircraft. However, the Nanchang Aircraft Company,[15] which produces military and commercial products, was not associated with these programs. Six weeks after learning about the diversion, Commerce notified McDonnell Douglas that the machine tools should be consolidated in a single storage facility in Tianjin. Commerce also suspended four licenses for the equipment that had not yet been shipped to China. This equipment included four gantry profilers that CATIC bought from McDonnell Douglas but temporarily leased to a supplier in New York.

Commerce Denied Request to Keep Machine Tools in Nanchang

On August 1, 1995, McDonnell Douglas submitted four license applications requesting that the six machine tools at the Nanchang Aircraft Company be authorized for use at that facility. Commerce subsequently denied three of these license applications covering the five-axis and three-axis machine tools and coordinate measuring machine. They were denied because (1) the transfer of equipment to Nanchang and installation of one item violated conditions placed on the original export license applications and (2) U.S. officials were concerned that the equipment installed at the Nanchang facility could be diverted to military programs.

Commerce returned the fourth Nanchang license application for the stretch press to the company without action. Commerce officials said that they should have denied this license application along with the other three. Officials explained that the license application for the stretch press was processed separately because the stretch press was controlled for different reasons. As a result, different technical staff reviewed these applications.

Commerce Approved Amended Licenses Transferring Equipment to Shanghai

In October 1995, McDonnell Douglas submitted 12 export license amendments requesting that all the exported equipment, now located in Tianjin and Nanchang, be transferred to the Shanghai aviation facility. Commerce officials urged quick approval of the amendments so that the equipment could be moved to a single location to manufacture parts for the Trunkliner program.

[15]The Nanchang Aircraft Company produces military and civilian aircraft, cruise missiles, and commercial products such as motorcycles.

The amended license applications were discussed over several months at interagency government meetings. According to senior Commerce officials, it took time to process the amended licenses partly because they wanted to ensure that the Shanghai facility was an acceptable location to transfer the equipment.[16] In response to officials' questions, McDonnell Douglas indicated the facility had a very small inventory of advanced machine tools and needed the exported equipment to complete its requirements for the Trunkliner program. McDonnell Douglas officials also assured government officials that they had 14 U.S. personnel on site at the Shanghai facility and could monitor the equipment.

The reviewing agencies agreed in February 1996 that the 12 export license amendments, permitting transfer of all the exported equipment to the Shanghai facility, should be approved with certain conditions. The conditions were similar to those incorporated in the original export licenses. A new condition was added specifying that all equipment must be placed or stored at the Shanghai facility within 120 days after license approval[17] and that McDonnell Douglas would report on the location of the machine tools until they were made operational.

Equipment Now Reported in Shanghai

McDonnell Douglas and U.S. Embassy officials reported that the diverted machine tools were now at the Shanghai aviation facility. On January 31, 1996, McDonnell Douglas advised Commerce that all of the equipment except the stretch press had been moved from Nanchang to Shanghai.[18] In April 1996, about 1 year after the diversion was first reported, a U.S. Embassy official confirmed that all the machine tools except the stretch press were in Shanghai.[19]

On August 9, 1996, we toured the Shanghai aviation facility and saw the stretch press, which plant officials said had arrived from Nanchang several days earlier. Shanghai officials informed us that they already had two

[16]Discussion of the amendments also occurred over a 3-week government furlough, which interrupted the processing of the amended licenses.

[17]In June 1996, McDonnell Douglas requested, and Commerce authorized, an additional 60 days to move the stretch press from the Nanchang Aircraft Company to the Shanghai facility. Commerce granted this extension subject to McDonnell Douglas providing biweekly status reports on the movement of the stretch press.

[18]The equipment was moved about 1 week before the U.S. government approved the amended licenses authorizing the transfer to Shanghai.

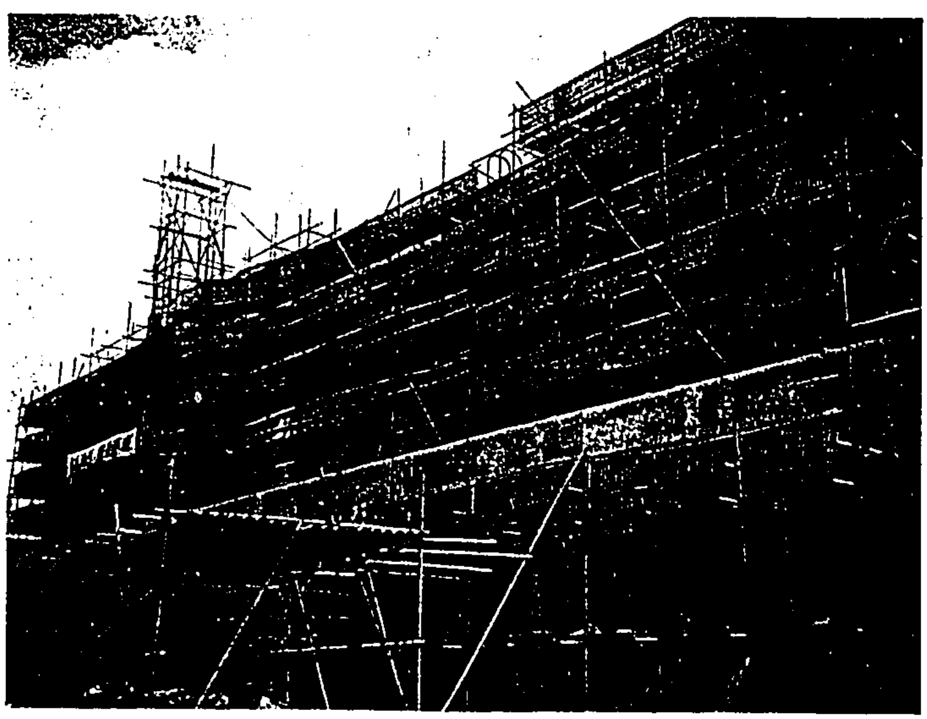
[19]The machine tools were stored in over 100 crates. The Embassy official was unable to inspect every crate but did confirm that the crates contained small and large parts of all the exported machine tools except the stretch press.

presses and had no plans to use this newly acquired stretch press. Commerce and McDonnell Douglas discussed the possibility of finding an alternate end user for the stretch press when the press was located in Nanchang,[20] but DOD objected, insisting that the press be moved to Shanghai before considering another end user.

Some License Conditions Will Not Apply Until Equipment Is Installed

A number of the amended license conditions will only apply after the equipment is installed at the facility. For example, metering devices, which measure operating time, must be read and logged daily once the equipment is installed. Shanghai aviation officials said that most of the tools will remain crated until a new machining center is completed at the Shanghai facility. During our visit, Shanghai officials showed us a new building they were constructing specifically to house the exported machine tools. (See fig. 3.) The building was planned for completion in September 1996. Shanghai officials said that the first MD-90 aircraft for the Trunkliner program is scheduled for delivery in April 1998.

Figure 3: Machining Center Under Construction at the Shanghai Aviation Industrial Corporation



[20]In March 1996, a Commerce official contacted a U.S. aircraft company about the possible use of the stretch press for commercial helicopter component manufacturing in China.

Commerce Began Investigation 6 Months After the Reported Diversion

Commerce's Office of Export Enforcement, which is responsible for investigating export control violations, did not formally investigate the machine tool diversion until 6 months after McDonnell Douglas reported the incident. McDonnell Douglas first briefed Commerce and other government officials on the status of the equipment in the spring and then again in the fall of 1995. In response to questions raised in a September 1995 interagency discussion about the diversion, a Commerce official indicated that the enforcement office was investigating the matter. However, the enforcement office initiated its investigation only after DOD formally requested such action in October 1995. The enforcement office referred the investigation to its Los Angeles Field Office in November 1995. A senior official said that they did not investigate sooner primarily because corrective action could be taken through the licensing approval process by suspending the licenses or modifying them to request assurances or movement of the equipment.

Based on its preliminary investigation, the Los Angeles Field Office wrote a report recommending that Commerce issue a temporary denial order against CATIC and its subsidiaries. A temporary denial order would have denied CATIC all U.S. export privileges. The Office of Export Enforcement headquarters rejected this recommendation because it concluded that the evidence in the report did not meet standards necessary to issue such an order as set forth in the Export Administration Act. Officials explained that a temporary denial order is used to prevent an imminent violation of export control law rather than punish a past violation. The Los Angeles Field Office subsequently referred the case to the Department of Justice for consideration. The U.S. Customs Service and the Office of Export Enforcement are now conducting an investigation under the direction of the Department of Justice.

Agency and Company Comments

In commenting on the draft of this report, DOD and the Departments of Commerce and State generally agreed with our findings. (See apps. III, IV, and V, respectively.) Each of these agencies also provided technical comments, which we have incorporated in the text where appropriate.

McDonnell Douglas also provided comments on the report. McDonnell Douglas stated that it would consent to public release of information on export licenses protected by section 12(c) of the Export Administration Act if their comments were printed in the report. McDonnell Douglas commented that (1) the U.S. government knew that the Trunkliner program might be reduced, (2) all of the machine tools were needed for

the Trunkliner program, and (3) McDonnell Douglas was under pressure to vacate the Columbus, Ohio, plant in the summer of 1994. After carefully reviewing their comments, as well as evidence we obtained from other sources, we have determined that no change was needed in our report. McDonnell Douglas's comments are reprinted in their entirety in appendix VI, along with our evaluation of them.

Scope and Methodology

To assess the civil and military capabilities of the machine tools, we met with and reviewed analyses performed by officials at the Defense Intelligence Agency, Central Intelligence Agency, Defense Technology Security Administration, the Air Force's National Air Intelligence Center, and the Department of Commerce. We also visited the Defense Logistics Agency's refurbishing center for machine tools in Pennsylvania and McDonnell Douglas's Long Beach, California, facility. Our report only contains limited information on the military significance of this equipment because much of the information is classified.

To assess the export licensing process and compliance with license conditions, we developed a detailed case history covering what information was available to decisionmakers, the accuracy of this information, the reasoning behind the decisions that were made, and the actions taken by parties involved in this export. We interviewed officials at all levels at DOD, the Departments of Commerce and State, and the Central Intelligence Agency who had provided information and analyses or participated in the decision-making process of the original and amended licenses. These included officials at Commerce's Bureau of Export Administration, the Defense Technology Security Administration, the Air Force, the Navy, the Office of the Joint Chief of Staff, the Defense Intelligence Agency, and the National Photographic Interpretation Center. We reviewed memorandums, correspondence, e-mail communication, and studies that pertained to these licenses as well as the case files themselves. We also met with State Department, Foreign Commercial Service, and Defense Attache officials at the U.S. Embassy, Beijing and visited the Shanghai Aviation Industrial Corporation in Shanghai. We attempted to ensure the accuracy of information by corroborating it with multiple sources.

Because of the ongoing Department of Justice investigation, we did not interview McDonnell Douglas officials who were directly involved in the sale of the equipment, the licensing process, or the performance of inspections in China. Moreover, our request to meet with the Office of

Export Enforcement investigator on this case was not approved. Our contact with McDonnell Douglas was limited to meetings with legal and technical staff in Long Beach on the capabilities of the machine tools. A McDonnell Douglas official was also present during our discussion with Shanghai Aviation officials. McDonnell Douglas did provide us with a written chronology covering its contacts with the U.S. government. This information was supplemented with information on the Trunkliner program and other related subjects. We did not attempt to meet with CATIC officials.

We performed our review from March to October 1996 in accordance with generally accepted government auditing standards.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution of this report until 10 days after its issue date. At that time, we will send copies of this report to other interested congressional committees; the Secretaries of Commerce, Defense, and State; and the Director, Office of Management and Budget. We will also make copies available to others upon request.

Please contact me at (202) 512-4383 if you have any questions concerning this report. Major contributors to this report are listed in appendix VII.

Katherine V. Schinasi
Associate Director
Defense Acquisitions Issues

Contents

Abbreviations

ACEP	Advisory Committee on Export Policy
AVIC	Aviation Industries Corporation of China
CATIC	China National Aero-Technology Import and Export Corporation
DOD	Department of Defense

Chronology Concerning Licenses for Machine Tools Exported to China

6/93	McDonnell Douglas met with the Department of Commerce to discuss the possible sale and export of surplus equipment and machinery located at the plant in Columbus, Ohio.
9/30/93	China National Aero-Technology Import and Export Corporation (CATIC) sent a letter to McDonnell Douglas stating that whether the procurement of equipment from Columbus "is successful shall have a big influence on the trunk liner programme and long term cooperation" between the Aviation Industries Corporation of China, a Chinese government defense industrial corporation, and McDonnell Douglas.
12/23/93	CATIC agreed to purchase some of the surplus equipment from the Columbus, Ohio, facility.
2/18/94	Agreement for sale of equipment in the Columbus facility to CATIC was executed.
5/94	McDonnell Douglas and CATIC agreed in principle to amend the Trunkliner agreement.
5/26/94	McDonnell Douglas submitted 24 export license applications for export to China of the equipment purchased from the Columbus, Ohio, facility.
7/20/94	News article reported the shifting of the production of 20 Trunkliner aircraft from China to the United States.
8/12/94	The Secretary of Commerce sent a letter to the Chinese Vice Premier of the State Council regarding the amendment to the Trunkliner program.
9/1/94	Commerce issued formal notices that eight of McDonnell Douglas's applications were being returned without action because the equipment did not require an individual validated license for export to China.
9/13/94	Embassy officials in China sent a cable indicating receipt of written assurance from CATIC and noted that CATIC had not yet decided whether to locate the Machining Center near Beijing at a site to be determined or at the Hongxing Aircraft Company.
9/14/94	Commerce issued 16 export licenses for export of the Columbus, Ohio, equipment to China. One license condition required the equipment be stored in one location until it was installed at the CATIC Machining Center.
9/29/94	McDonnell Douglas and CATIC reached initial agreement to amend the contract to produce 20 aircraft in Long Beach, California, and 20 aircraft in China.
11/4/94	McDonnell Douglas and CATIC reached a final agreement to modify the original Trunkliner agreement so that the first 20 aircraft would be produced in Long Beach, California with the remaining 20 aircraft to be produced in China.
11/12/94 - 2/18/95	The equipment covered by 12 of the 16 export licenses was shipped to China.
3/24/95	McDonnell Douglas officials investigated the location of the equipment in China and discovered that six pieces were stored at the Nanchang Aircraft Company and that the remainder was stored in Tianjin, China.
4/4/95	McDonnell Douglas submitted a written report to Commerce and the Department of Defense (DOD) informing them of the results of its March 24, 1995, investigation.
4/20/95	McDonnell Douglas briefed a U.S. government interagency group on the location of the equipment in China, advising Commerce that CATIC's plans to build a new factory in Beijing had not materialized.
8/1/95	McDonnell Douglas submitted export license applications requesting permission to allow the equipment diverted to Nanchang to remain at the Nanchang Aircraft Company.
8/23/95	McDonnell Douglas reported to Commerce by telephone that it had discovered after visiting the Nanchang facility that the stretch press at Nanchang had been uncrated and placed inside a building, but the press was not operational and the building had no electricity.

(continued)

9/28/95	McDonnell Douglas was told that Commerce would not permit transfer of the equipment at Nanchang to the Nanchang Aircraft Company.
10/95	McDonnell Douglas submitted 12 export license amendment requests to permit all the equipment in Tianjin and Nanchang to be transferred to the Shanghai Aviation Industrial Corporation in Shanghai.
10/4/95	DOD sent a memorandum to Commerce asking for the diversion to be investigated.
11/7/95	Commerce's Office of Export Enforcement initiated official investigation.
11/28/95	Commerce's Los Angeles Field Office sent its investigative report to Commerce and recommended a temporary denial order against CATIC, suspending its export privileges. Commerce's Office of Export Enforcement returned the recommendation, citing insufficient evidence.
1/31/96	McDonnell Douglas advised the Department of Commerce that five of the six machines at Nanchang Aircraft Company had been moved from Nanchang to the facility in Shanghai.
2/3/96	Commerce denied three of the four export license applications filed by McDonnell Douglas on August 1, 1995, requesting approval to transfer the equipment in Nanchang to Nanchang Aircraft Company; the fourth, pertaining to the stretch press, was returned to the applicant without action.
2/6/96	Commerce approved with conditions the 12 export license amendment requests filed by McDonnell Douglas in October 1995, permitting transfer of all the equipment to the Shanghai Aviation Industrial Corporation in Shanghai.
2/10/96	McDonnell Douglas inspected the one piece of equipment, the stretch press, remaining in Nanchang and observed that, although it was partially assembled, it was not connected to either electrical or hydraulic power sources and was not operational.
3/96	Commerce contacted a U.S. aircraft company about the use of the stretch press for commercial helicopter component manufacturing in China.
4/23/96	A U.S. Embassy official visited the Shanghai aviation facility and inspected the crated machine tools.
4/29/96	A McDonnell Douglas letter sent to Commerce reported that the machines at the Shanghai aviation facility were in their original crates or were being removed and installed.
6/7/96	Commerce granted McDonnell Douglas's request to extend the time authorized to move the stretch press from 120 to 180 days.
6/21/96	A McDonnell Douglas letter confirmed that two pieces of the stretch press had arrived in Shanghai.
8/5/96	The remaining pieces of the stretch press arrived at the Shanghai aviation facility.
8/9/96	GAO toured the Shanghai aviation facility and observed the stretch press and a new building being constructed reportedly to house the machine tools.

Conditions for Exporting Machine Tools to the CATIC Machining Center

Commerce placed 14 conditions on the export of McDonnell Douglas machine tools to CATIC. Later, it subsequently approved relocating the equipment to the Shanghai aviation facility with similar conditions.

1. The only parts programs authorized to be loaded and run in the numerical control device are those authorized for "Trunkline" aircraft and "offset" from McDonnell Douglas project as negotiated with McDonnell Douglas Corporation.

2. Where applicable, the numerical control device (machine control unit) must be modified to provide password protection. Password access is granted to authorized personnel only for authorized parts.

3. The machine tools approved for export must be installed at the CATIC Machining Center. McDonnell Douglas must provide written certification of delivery and installation to Commerce. Should the CATIC facility not be ready when the equipment arrives, the equipment will be stored in one facility. That facility will be subject to the inspection requirements stated in condition no. 5. McDonnell Douglas will notify the U.S. government of the location of the machine tools and notify it if the equipment is moved before the plant is completed.

4. The machines must have a metering device that measures operating time (e.g., a Hobbs Meter). The elapsed operating time will be read and logged into a production logbook on a daily basis. The logbook will be furnished to DOD and the Office of Export Enforcement on a quarterly basis.

5. After installation of the machines, McDonnell Douglas must submit quarterly reports for the next 2 years to the Office of Export Enforcement and DOD. The reports must include information as to whether the equipment is still being used for the purposes approved under the conditions of the licenses, and any discrepancies must be noted in the use of the timing device, password, or other security requirements. A McDonnell Douglas representative will have the right of access to inspect the equipment at any time, wherever located, during normal working hours and whenever the equipment is in operation. Should McDonnell Douglas wish to withdraw its personnel, it must notify the U.S. government well in advance. As agreed with arrangements with the Chinese government, a U.S. government representative will conduct a post-shipment verification visit to the facility after the equipment is installed.

6. None of the equipment may be resold, transferred, or reexported without prior written approval from the U.S. government.

7. This equipment is licensed exclusively for the civilian use of implementing the MD80/90 series McDonnell Douglas design for the development of the Chinese Trunkline and offset from McDonnell Douglas.

8. The equipment will not be used by or for military or nuclear end users or uses.

9. These licenses do not authorize transfer of technical data other than that required for normal maintenance, repair, and operation of the equipment. Note: The export of McDonnell Douglas proprietary data concerning plant layout for the manufacture of MD80/90 airframe parts may require an individual validated license under the provisions of the export administration regulations.

10. McDonnell Douglas must inform the end user of all conditions.

11. The licenses will be approved only after senior CATIC officials provide assurance that these machines will be used only by the end user for the end uses specified in these licenses.

12. Employees of or contractors to McDonnell Douglas who visit the CATIC facility will report on the use of the equipment as observed during their visits. Such reports will be available to Commerce. Those who observe unauthorized use of the equipment must report these discrepancies immediately to Commerce.

13. No parts produced by this equipment that are on the U.S. commodity control list for national security or nuclear nonproliferation reasons can be exported by CATIC to Libya, Cuba, or North Korea (country groups S or Z).

14. McDonnell Douglas must advise the U.S. government of any changes in the negotiated contract for 40 Trunkline aircraft. Notification must include any increase or reduction in aircraft or offset production requirements. If the McDonnell Douglas Trunkline contract is renegotiated below 40 aircraft, these machine tools could still only be used to produce parts for the Trunkline aircraft and McDonnell Douglas offsets. Any machining capacity freed up by a reduction in the production requirements will be

viewed as excess capacity by the U.S. government and considered in any future Chinese machine tool licensing actions.

Comments From the Department of Defense

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
2600 DEFENSE PENTAGON
WASHINGTON, DC 20301-2600

INTERNATIONAL SECURITY POLICY

10 OCT 1996

Ms. Katherine Schinasi
Associate Director, Defense Acquisition Issues,
National Security and International
Affairs Division
U.S. General Accounting Office
Washington, D.C. 29548

Dear Ms. Schinasi:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft reports, EXPORT CONTROLS: "Sensitive Machine Tool Exports to China," dated September 23, 1996 (GAO Code 707165), OSD Case 1232; and "Sale of Telecommunications Equipment to China," dated September 23, 1996 (GAO Code 707178), OSD Case 1233.

The Department of Defense has reviewed the reports and has no objection. Technical corrections were separately provided. The Department appreciates the opportunity to comment on the draft reports.

Mitchel B. Wallerstein
Deputy Assistant Secretary of Defense
Counterproliferation Policy

Comments From the Department of Commerce

THE SECRETARY OF COMMERCE
Washington, D.C. 20230

Ms. Katherine Schinasi
Associate Director
Defense Acquisitions Issues
U.S. General Accounting Office
Washington, D.C. 20548

Dear Ms. Schinasi:

Thank you for the opportunity to comment on the General Accounting Office's draft report on the Export of Sensitive Machine Tools to China. In general, I found the report to be even-handed and accurate, but I did have some concern over your characterization of the Bureau of Export Administration's enforcement efforts. Specific comments and recommendations for change are provided in the enclosed paper.

Sincerely,

Michael Kantor

Enclosure

Export Controls - Sensitive Machine Tool Exports to China
Comments of the Department of Commerce

Licensing

First, we would recommend, as a general comment, that the draft report should be amended to reflect the fact that the most sensitive machine tools (the five axis machines) were never used by the Chinese. These machine tools remained in their shipping crates for the entire period covered by the report. Although some of the five axis machine tools were shipped to a destination other than that approved in the license, the decision of the Chinese not to unpack them, much less install them, suggests that their utility to China may be less than has been alleged and that they were certainly not put to use contrary to U.S. national security interests. This concern could be addressed by adding a new final sentence to the third paragraph on page eleven of the report to read:

See comment 1.

> "The failure of the Chinese to unpack or install these five axis machines for the entire period after their arrival in China suggests that concerns over the machine tools' utility for military production may have been overstated."

Now on pp. 14 and 23.
See comment 2.

Second, on page fifteen, second paragraph, and on page twenty four, first paragraph, we would note that the license for the stretch press is not "leftpending," but has been closed out and returned without action (RWA) to the applicant.

Enforcement

BXA takes exception to four enforcement-related points raised or implied by the draft report.

Now on p. 17.

See comment 2.

First, the draft report, in describing the current status of the investigation into McDonnell Douglas's exports to CATIC, states (at p. 19): "[OEE's] Los Angeles Field Office subsequently referred the case to the Department of Justice for consideration. The U.S. Customs Service is now conducting an investigation under the direction of the Department of Justice." While the first sentence of that quotation is accurate, the second sentence is incomplete and misleading. The fact is that OEE initiated the criminal referral to Justice and subsequently invited Customs to participate. Both OEE and Customs have since been conducting a joint investigation under the direction of the Justice Department, as we repeatedly told GAO investigators. This omission by the draft report should be rectified. If GAO still questions whether OEE is a full partner in this investigation, we would again invite GAO to talk with the Assistant U.S. Attorney, Eric Dubelier, who is directing the investigation.

Second, the draft report mentions, just prior to the language quoted above, that OEE's Los Angeles Field Office wrote a report recommending issuance of a temporary denial order (TDO) against CATIC and its subsidiaries, but that the Office of Export Enforcement headquarters rejected this recommendation because evidence in the report did not meet standards necessary to issue such an order. This is also incomplete and misleading in its context. The draft report should clarify that the restrictive standard for issuing a TDO is set by the Export Administration Act, which permits a TDO only to prevent imminent violations, not to punish past violations. In addition, the draft report should also acknowledge the fact that when OEE headquarters rejected the TDO recommendation, headquarters instructed the Los Angeles Field Office to take specific steps in continuing its investigation. In neglecting this fact and the actions that were subsequently taken, the draft report creates the false impression that OEE has not made important contributions to the investigation.

Now on p. 17.

See comment 2.

Third, the draft report implies conclusions about the conditions imposed on the licenses issued to McDonnell Douglas that would impede the ongoing investigation. In particular, the draft report's discussion of the applicable license conditions states (at p. 12): "Specifically, the license conditions ... required the machine tools be stored in one location until the CATIC Machining Center was constructed ... ." The draft report goes on to state (at p. 14): "The machine tools were shipped to three unapproved locations in violation of the license conditions and CATIC's assurances regarding end use. ... The dispersion violated license conditions that specified the equipment should be stored in one facility if the CATIC Machining Center was not yet built." (emphasis added)

Now on p. 10.

Now on p. 11.

Whether and, if so, what violations occurred in connection with these exports is the subject of the ongoing criminal investigation that the Justice Department is now directing. We are seriously concerned that the draft report's assertions and premature conclusions that violations did occur could jeopardize this criminal investigation. No one disputes that much of the equipment was sent to places that were not specified in the licenses that BXA approved. Whether that (or any other aspect of the transactions) constitutes a "violation" is a matter for a court to decide, not GAO. We cannot overstate the importance of this point and we urge GAO to review the draft report carefully and remove such unproven conclusions in the report summary (at page 4), the body of the report, and as the issue identified on page 2 of the report ("Were export control license conditions violated...?").

See comment 3.

Fourth, once McDonnell Douglas representatives informed us that the items had been delivered to a unauthorized location, our top priority was to forestall any adverse impact on our national security by ensuring that the equipment was moved to an

See comment 4.

acceptable facility, such as Shanghai, as quickly as possible. Achieving that result necessitated the ongoing cooperation of McDonnell Douglas officials, which we obtained. Throughout this period, it was important to continue the investigation in a way that did not adversely affect that cooperation so as not to jeopardize the movement of the equipment to an approved location. Thus far we have succeeded in accomplishing our national security objectives while actively pursuing the investigation.

Section 12(c)

The second sentence of the section 12(c) notice on the cover page of the draft report should read:

See comment 5.

"Its disclosure is prohibited, except in accordance with section 12(c)."

Now on p. 19.
See comment 5.

Revise the second sentence of the last paragraph of the report (at p. 20) to read as follows:

"We are also making copies of this report available to others upon request, subject to the limitations of section 12(c) of the Export Administration Act of 1979, as amended."

The following are GAO's comments on the Department of Commerce's letter dated October 11, 1996.

GAO Comments

1. The report accurately notes that the equipment was relocated before it was misused. The diversion of the machine tools to Nanchang, a facility engaged in military production, does not support Commerce's statement that concerns over the military utility of this equipment was overstated. The Chinese were only able to partially install the stretch press and did not uncrate the other equipment because the diversion was discovered.

2. We have modified the text of the report to address this comment.

3. We agree that a court of law may ultimately examine whether a legal violation occurred and who was responsible and have modified the report accordingly. However, Commerce, in a letter to McDonnell Douglas, indicated that the movement of the equipment to Nanchang and the partial installation of the stretch press was a "direct violation of the conditions under which the equipment was originally authorized for export to China."

4. Commerce stated that its top priority was to quickly relocate the equipment to an acceptable facility. As discussed in our report, all the equipment was relocated to an approved facility about 17 months after the diversion was first reported. Commerce also noted in its comments that it needed to continue the investigation in a way that did not adversely affect cooperation from McDonnell Douglas. As discussed in our report, Commerce's enforcement office did not begin an official investigation until 6 months after the reported diversion and only after requested by DOD. During this time, Commerce's licensing group worked with McDonnell Douglas on export license amendments to transfer the equipment to an acceptable facility.

5. This report is not restricted by section 12(c) of the Export Administration Act. McDonnell Douglas consented to waive its confidentiality rights under section 12(c) with respect to the information contained in this report.

Comments From the Department of State

United States Department of State

Washington, D.C. 20520

OCT 21 [illegible]

Dear Mr. Hinton:

We appreciated the opportunity to review your draft reports on export controls, "Sensitive Machine Tool Exports to China" and "Sale of Telecommunications Equipment To China," GAO/NIASD-97-4, GAO Job Code 707165 and GAO/NIASD-97-5, GAO Job Code 707178, respectively.

The Department of State notes that the reports address a number of concerns that the Congress has raised about sensitive dual-use exports to China. We found that both reports contain a balanced and reasoned analysis of the issues raised by the exports of machine tools and broadband telecommunication equipment to China. To the best of our knowledge, the reports clearly and accurately reflect the historical background of both cases.

We would, however, like to make two specific comments aimed at clarifying statements made in the machine tools report. First, the fourth sentence in the last paragraph on page 6 suggests that former COCOM members decided to control machine tool exports to China. Although China is not mentioned in that particular sentence, it is mentioned in the previous sentence. We believe it would be clearer to state that "In March 1994, the Committee disbanded, but former members agreed to retain global controls on 5-axis machine tools on the COCOM list though eliminating prenotification requirements."

Now on p. 6.

See comment 1.

Secondly, we recommend that you delete the second sentence in the first paragraph on page 8 which states that the Commerce and Defense Departments were the primary reviewers of the McDonnell Douglas license applications. This creates the misimpression that there are "primary" agencies involved in interagency license review. In fact, all agencies involved have an equal voice in the decision making process.

Now on p. 7.

See comment 2.

We hope that the comments we have conveyed are useful. If you have any questions, please call Mr. O'Mara, PM/ATEC, at (202) 647-1837.

Sincerely,

Kathleen J. Charles

Kathleen J. Charles, Acting
Chief Financial Officer

Mr. Henry L. Hinton, Jr.
Assistant Comptroller General,
National Security and International Affairs,
U.S. General Accounting Office.

The following are GAO's comments on the Department of State's letter dated October 21, 1996.

GAO Comments

1. We made changes to the report to clarify that five-axis machine tools were controlled by the Coordinating Committee for Multilateral Export Controls to other countries in addition to China.

2. We made changes to the report to reflect State's comments.

Comments From McDonnell Douglas

BRYAN CAVE LLP

700 THIRTEENTH STREET, N.W.
WASHINGTON, D.C. 20005-3960
(202) 508-6000
FACSIMILE: (202) 508-6200

ST. LOUIS, MISSOURI
NEW YORK, NEW YORK
KANSAS CITY, MISSOURI
OVERLAND PARK, KANSAS
PHOENIX, ARIZONA
LOS ANGELES, CALIFORNIA
SANTA MONICA, CALIFORNIA
IRVINE, CALIFORNIA

LONDON, ENGLAND
FRANKFURT AM MAIN, GERMANY
RIYADH, SAUDI ARABIA
KUWAIT CITY, KUWAIT
DUBAI, UNITED ARAB EMIRATES
HONG KONG
AFFILIATED OFFICE IN BEIJING

STANLEY J. MARCUSS
PARTNER

DIRECT DIAL NUMBER
(202) 508-6074
INTERNET ADDRESS
SMARCUSS@BRYANCAVELLP.COM

November 12, 1996

VIA HAND DELIVERY

Ms. Katherine V. Schinasi
Associate Director
Defense Acquisitions Issues
U.S. General Accounting Office
National Security and International Affairs Division
Washington, D.C. 20548

Re: GAO Report on Sensitive Machine Tool Exports to China

Dear Ms. Schinasi:

This is in response to your request that we notify you as to whether McDonnell Douglas has any objections to public release of the GAO's report on certain machine tool exports to China. As discussed, we are authorized to inform you that McDonnell Douglas waives it confidentiality rights under section 12 (c) of the Export Administration Act with respect to the information contained in such report provided the report reprints in its entirety the enclosed McDonnell Douglas comments. Such comments are necessitated by some of the erroneous and misleading statements contained in the report.

See comment 1.

We appreciate your cooperation on this matter. Please let us know if you have any questions.

Sincerely yours,

Stanley J. Marcuss

SJM/gh
Enclosure
cc: Karen S. Zuckerstein (w/encl. by facsimile)

MCDONNELL DOUGLAS

McDonnell Douglas Comments on GAO Report on Sensitive Machine Tool Exports to China

November 12, 1996

See comment 1.

Because section 12 (c) of the Export Administration Act prohibits the disclosure without consent of information relating to export licenses, the GAO asked McDonnell Douglas whether it had any objections to public release of the GAO's report on certain machine tool exports to China involving export licenses issued to McDonnell Douglas. McDonnell Douglas has consented to release of the report despite the existence of a number of errors and potentially misleading statements in the report. McDonnell Douglas does not want to impede access to information, although imperfect and incomplete, that might contribute to the public's understanding of important issues relating to U.S. trade policy toward China in the area of so-called dual use exports.

McDonnell Douglas is pleased, moreover, that the report makes it clear that McDonnell Douglas was the first to discover that some of the machine tools had been delivered to an unauthorized location in China, that it promptly reported the problem to the U.S. government, and that it played a constructive role in cooperation with the U.S. government in developing and implementing a solution. McDonnell Douglas is also gratified that the episode covered by the report resulted in no harm to the national security, as the Commerce Department recognizes, and is proud to have played a key role in helping to safeguard U.S. national security interests.

Our principal although not exclusive concerns about the report are as follows:

Now on p. 8.
See comment 2.

The report points out that McDonnell Douglas advised the U.S. government in August of 1994, while the export license applications were pending, that it had "a firm binding contract for the coproduction of 40 aircraft with CATIC" under the Trunkliner program. While the report acknowledges that McDonnell Douglas also informed the government during that period that amendments to the Trunkliner agreement were under discussion, it fails to point out in that context that it was not until November of 1994 that an amendment to the Trunkliner agreement reducing the number of aircraft to be assembled in China was actually executed. The report further fails to point out that the export licenses expressly acknowledged the possibility that the number of aircraft to be assembled in China could be reduced and did not provide that their validity would be affected by any such change.

See comment 3.

Equally important is the failure of the report to point out that, even as amended, the Trunkliner agreement continues to call for the coproduction of forty aircraft, the only difference being that twenty are to be assembled in China and twenty are to be assembled in the United

P O Box 516, Saint Louis, MO 63166-0516 (314) 232-0232 TELEX 44-857

States. The fact that twenty are to be produced in the United States is irrelevant to the issue of CATIC's need for the machine tools, since the Trunkliner agreement requires McDonnell Douglas to purchase from CATIC, as offset, parts and components for aircraft to be assembled in the United States. As the export license applications themselves indicated, the machine tools were intended in part to assist CATIC in producing the parts and components that McDonnell Douglas is required to purchase under its offset obligations under the Trunkliner agreement.

By failing to paint a complete picture of the facts relating to this matter, the report creates the false impression that there may be an issue with respect to the Trunkliner agreement amendment when, in reality, none exists.

Now on p. 8.
See comment 4.

A second major concern is with the report's statement that "[s]ubsequent events indicated that not all of the equipment was needed to support Trunkliner aircraft production." This statement is based on a reported acknowledgment by Chinese officials that they did not need one of the machines, the hydraulic press, at the Shanghai Trunkliner facility to which it was transferred after having first been delivered to an unauthorized location in Nanchang.

It is incorrect, however, to infer anything about the need for the machine tools in the Trunkliner program on the basis of the Shanghai facility's need for the hydraulic press. The press, like all the other equipment, was to have been installed in a new machining center in Beijing, not at the Trunkliner facility in Shanghai. When the machining center was not built, the U.S. government required that the press be transferred from Nanchang to Shanghai. The government was fully informed prior to such transfer, however, that there was no need for the press at the Shanghai facility and that CATIC might subsequently request its retransfer to another location. Hence, the absence of a need for the press at the Shanghai facility is no indication that other equipment was not needed to support the Trunkliner program.

Now on p. 8.
See comment 5.

The third major concern about the report is its suggestion that McDonnell Douglas was under no pressure to move the machine tools out of the Columbus, Ohio facility in the summer of 1994. The report ignores the fact that McDonnell Douglas had agreed with the Air Force that it would vacate the Columbus facility by September 1, 1994, and that McDonnell Douglas had set itself a July 5th deadline for removing the equipment from the plant in order to make preparations to turn the facility over to the Air Force by that deadline. As it turned out, immediately prior to September 1st, the Air Force extended the deadline for vacating the plant and later established the storage fees to be charged for the space. Until the deadline was extended, however, McDonnell Douglas had to assume that alternative arrangements for the equipment were necessary. Under the circumstances, it is incorrect to suggest that McDonnell Douglas was under no pressure to move the machine tools out of the Columbus, Ohio facility during the summer of 1994. It is equally incorrect to imply that the constraints that McDonnell Douglas faced in that regard affected the government's review of the export license applications.

See comment 1.

While it would have been better if the report did not contain these errors and misleading statements, McDonnell Douglas appreciates the effort the GAO has made to correct some of the problems we identified in an earlier version of the report.

2

The following are GAO's comments on McDonnell Douglas's letter dated November 12, 1996.

GAO Comments

1. McDonnell Douglas makes this generalized statement several times in its letter. However, we have carefully reviewed its specific comments as well as the evidence we obtained from multiple sources and continue to believe that the presentation in the report is accurate.

2. Although the amendment to the Trunkliner agreement was signed in November 1994, Commerce documents clearly indicate that an agreement in principle to amend the contract had been reached as early as May 1994. DOD licensing officials first learned of the possible reduction in the Trunkliner program in July 1994 from press reports, not McDonnell Douglas. However, McDonnell Douglas in an August letter to DOD, assured DOD that it had a firm binding contract for the coproduction of 40 aircraft.

3. The reduction in the number of aircraft to be built in China is relevant to CATIC's need for the machine tools. The amendment to the Trunkliner agreement calling for the direct purchase of 20 U.S.-built aircraft meant that most of the parts for these aircraft would come from existing McDonnell Douglas suppliers, not from new production facilities to be built in China. According to a government official, one of the reasons for the contract amendment was to speed up deliveries of aircraft to Chinese airlines rather than wait until the Chinese Trunkliner factories were able to produce complete aircraft. By August 1996, deliveries of the 20 U.S.-built aircraft had already begun under this amended contract even though none of the exported machine tools were yet operational.

The report acknowledges that McDonnell Douglas noted in its export applications that the machine tools would also be used by CATIC to perform related offset work (i.e., production of parts for U.S.-built McDonnell Douglas aircraft). However, during the licensing review process, neither McDonnell Douglas nor the reviewing agencies took the position that offset work was the major justification for approval of these export license applications.

4. The observation that not all of the equipment was needed to support Trunkliner aircraft production is supported by more than just the observation that existing Trunkliner factories had stretch presses with sufficient capacity to perform Trunkliner work. As noted in the report, CATIC, McDonnell Douglas' partner in producing Trunkliner aircraft in

China, diverted not only the stretch press but also one five-axis machine tool, three three-axis machine tools, and one coordinate measuring machine to the Nanchang Aircraft Company—a factory not involved in Trunkliner production. McDonnell Douglas then asked the Commerce Department to allow these machine tools to remain at Nanchang for production unrelated to the Trunkliner program. The diversion of the tools to Nanchang and the submission of license amendments to permit the tools to remain in a non-Trunkliner factory do not support the statement that all of these tools were required for Trunkliner production as McDonnell Douglas indicated during the export application process.

5. We agree that McDonnell Douglas was to vacate the Ohio plant in the summer of 1994. However, as noted in the report, McDonnell Douglas told the reviewing agencies that the Air Force, not McDonnell Douglas, was requiring it to leave the plant in Ohio by July 5, 1994, and it would be forced to pay high storage fees for the machine tools after that date. Further, in August 1994, McDonnell Douglas told DOD that "storage is running at $45,000 per month" and urged action on the licenses so that "mounting storage costs can be curtailed." As noted in the report and acknowledged by McDonnell Douglas in its comments, McDonnell Douglas, not the Air Force, set the dates it had to leave the plant in Ohio. Further, as noted in our report, beginning in September 1994, the Air Force actually charged the company about $7,500 per month for storage fees.

Major Contributors to This Report

National Security and International Affairs Division, Washington, D.C.

Karen S. Zuckerstein
David C. Trimble
Anne-Marie Lasowski
John Neumann